

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011484**Date Inspected:** 13-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspector: N/A

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

Segment Assembly

ZPMC issued "Inspection Notification Sheet" number 01122010-1 informing QA that at 1600 hours ABF Inspectors will be performing magnetic particle (MT) and ultrasonic (UT) inspections of OBG repair weld SEG022A-007 between 5AE Baseplate and Side Plate and at 1930 hours ABF Inspectors will be performing magnetic particle and ultrasonic inspections of OBG repair weld SEG024A-005 between 5BE Baseplate and Side Plate. This QA arrived at welds SEG024A-005 and SEG022A-007 at around 1940 hours and observed ABF personnel have marked weld SEG024A-005 as being MT and UT acceptable and weld SEG022A-007 has several ultrasonic transverse indications marked in the weld repair areas. This QA Inspector performed ultrasonic inspections of weld SEG024A-005 repair locations for detection of longitudinal and planar transverse indications utilizing scanning pattern A, B, C and D (AWS D1.5 Fig 6.7) and no additional UT rejections were observed. This QA Inspector performed ultrasonic inspections of weld SEG022A-007 repair locations for detection of longitudinal and planar transverse indications utilizing scanning pattern D (AWS D1.5 Fig 6.7) and confirmed this weld has multiple transverse UT rejections. Items observed on this date appeared to generally comply with

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applicable contract documents.

Blast Shop #1

This QA Inspector performed random visual inspections of the upper internal surfaces on OBG Segment 8BE between panel point (PP)65 and panel point PP66 as per ZPMC Notice of Inspection request number 2501. ZPMC had recently completed grit blasting, prior to application of paint, and the steel surfaces that were inspected were mostly free of rust oxide and other contaminants that had previously obscured portions of the plates and weld surfaces. This QA Inspector visually observed approximately 60 locations that required grinding to resolve visual weld spatter, arc strikes, shallow nicks, scrapes, and other minor surface rejections. The areas were marked with colored chalk and ZPMC workers were using electric grinders to remove the visually unacceptable areas and ZPMC will be performing magnetic particle inspections of the arc strike removal areas after they were removed. The weld between panel point 65 Floor beam FB15A and Floor Beam FB10B appears to have two locations which require weld repairs due to weld overlap and weld underfill conditions. These two weld repair areas were covered with gray duct tape and ZPMC will perform weld repair after the initial painting is completed.

Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
